

IN THE CLAIMS:

Please AMEND claims 1, 6, 7, 11, 16, 24 and 25, and CANCEL claims 3, 15 and 20 without prejudice or disclaimer in accordance with the following:

1. (CURRENTLY AMENDED) An optical disc, comprising:

track grooves formed in a radial direction of the disc, with the disc being divided into a plurality of zones, the track grooves being formatted into a waved pattern in the radial direction of the disc, to be overlapping over recorded user data so as to record zone address information for each of the divided zones based on a predetermined modulation rule, wherein

each zone has an initial recording capacity and, during a recording of the user data, a zone start pattern and/or zone end pattern is additionally recorded in each zone, and

when a first zone is detected, user data is recorded in the data recording area of the first zone before a predetermined pattern is recorded in at least one of the coupling areas of the first zone, which is recorded until a next zone is detected.

~~to which an arbitrary recording capacity is added as needed for each zone,~~

~~wherein an arbitrary area at an inner and/or outer circumferences in each zone includes a coupling area separate from a user data recording area to provide the arbitrary recording capacity as needed to each zone, and~~

~~wherein, during recording of the user data, in each zone a zone start pattern and/or zone end pattern is additionally recorded at a position that is based on a size of the arbitrary recording capacity.~~

2. (CANCELLED)

3. (CANCELLED)

4. (CANCELLED)

5. (CANCELLED)

6. (CURRENTLY AMENDED) The optical disc of claim 1, wherein, ~~when data is recorded or reproduced at both sides of a land portion and a groove portion formed by one of the track grooves~~ comprise a land portion and a groove portion, and wherein, a sequence in recording or reproduction of data in each zone is performed according to a following sequence: after recording or reproduction at a groove portion in each zone is completed, recording or reproduction at the land portion is performed.

7. (CURRENTLY AMENDED) The optical disc of claim 1, wherein the track grooves comprise a land portion and a groove portion, and wherein a sequence in recording or reproduction of data in each zone is performed according to a following sequence:~~The optical disc of claim 1, wherein, when data is recorded or reproduced at both sides of a land portion and a groove portion formed by one of the track grooves, a sequence in recording or reproduction of data in each zone is performed according to a following sequence: after recording or reproduction at a land portion in each zone is completed, recording or reproduction at the groove portion is performed.~~

8. (ORIGINAL) The optical disc of claim 1, wherein the optical disc is a DVD-RAM disc.

9. (ORIGINAL) The optical disc of claim 1, wherein each zone has a plurality of sectors.

10. (ORIGINAL) The optical disc of claim 9, wherein each of the plurality of sectors has a sector address portion to store a corresponding sector address.

11. (CURRENTLY AMENDED) An optical disc, comprising:
a plurality of tracks formed in a spiral direction of the optical disc, each track having at least a groove portion; and
a plurality of zones, each zone including a predetermined number of the plurality of tracks, each zone further including a data recording area, a zone start pattern at an inner circumference of the data recording area, a zone end pattern at an outer circumference of the data recording area, and at least one coupling area having an arbitrary size at an inner circumference of the zone start pattern and/or an outer circumference of each the zone end pattern, the coupling area being separate from a user data recording area of each zone,
wherein the optical disc is formatted to include zone addresses for each zone by formatting a portion of the corresponding zone track grooves, in each zone, to include a wobble pattern based on a predetermined modulation rule, and
wherein, during a recording of user data, arbitrary data is first recorded in the zone start pattern, then user data is recorded in the data recording area, then arbitrary data is recorded in the zone end pattern, and then arbitrary data is recorded in the coupling area, ~~in each zone a zone start pattern and/or zone end pattern is additionally recorded at a position that is based on a size of the coupling area.~~

12. (ORIGINAL) The optical disc of claim 11, wherein each track further includes a land portion.

13. (ORIGINAL) The optical disc of claim 12, wherein land and groove recording and reproduction is possible, respectively, to and from more than one spiral of the optical disc.

14. (ORIGINAL) The optical disc of claim 11, wherein the optical disc is a DVD-RAM.

15. (CANCELLED)

16. (CURRENTLY AMENDED) The optical disc of claim ~~15~~11, wherein ~~a predetermined pattern is the arbitrary data~~ recorded in the coupling area, ~~with the pattern being~~ is based on a recording or reproduction system to perform recording or reproduction, respectively, to or from the optical disc.

17. (CANCELLED)

18. (ORIGINAL) The optical disc of claim 11, wherein the predetermined modulation rule is one of an FM modulation, an AM modulation, and a PM modulation.

19. (ORIGINAL) The optical disc of claim 11, wherein the predetermined number of the plurality of tracks for each zone is based upon the data recording capacity needed for each zone plus an arbitrary recording capacity.

20. (CANCELLED)

21. (ORIGINAL) The optical disc of claim 11, wherein each zone has a plurality of sectors.

22. (ORIGINAL) The optical disc of claim 21, wherein each of the plurality of sectors has a sector address portion to store a corresponding sector address.

23. (CANCELLED)

24. (CURRENTLY AMENDED) A method of recording data on an optical disc, comprising:

dividing the optical disc into a plurality of zones;

formatting a zone address portion of one of the zones to include a wobble pattern based on a predetermined modulation rule and corresponding to an address of the zone;

recording a zone start pattern in a leading portion of the user data portion of the zone to define a start of a user data portion of the zone;

recording user data in ~~a~~the user data portion of the zone following an end of the zone start pattern;

recording a zone end pattern following an end of the user data to define an end of the user data portion of the zone; and

recording a predetermined pattern in an additional coupling portion of the zone, after the recording of the zone start pattern, the user data, and the zone end pattern; and

~~recording, in each zone, a zone start pattern and/or a zone end pattern at positions that are based on a size of the additional coupling portion.~~

25. (CURRENTLY AMENDED) A method of recording data on an optical disc, comprising:

recording user data in a user data portion of the zone;

recording a predetermined pattern in an additional coupling portion of the zone, after the recording of the user data;

recording a zone start pattern and/or zone end pattern in each zone, during the recording of the user data;

dividing the optical disc into a plurality of zones; and

formatting a zone address portion of one of the zones to include a wobble pattern based on a predetermined modulation rule and corresponding to an address of the zone; and

~~recording user data in a user data portion of the zone and an additional coupling portion as needed, including recording of a zone start position, then recording of the user data, then a recording of a zone end position, wherein the zone start pattern and/or the zone end pattern are recorded at positions that are based on a size of the additional coupling portion.~~